Utah's All Payer Claims Database

2014 Clinic Quality Comparisons: Background and Methodology

March 2016

Office of Health Care Statistics
Utah Department of Health

288 North 1460 West
PO Box 144004
Salt Lake City, UT 84114-4004
Phone: 801-538-6700
http://health.utah.gov/hda/

Background

Utah's All Payer Claims Database

The Utah Department of Health, Office of Health Care Statistics (OHCS) is responsible for the creation and management of the All Payer Claims Database (APCD) under authority granted to the Department and the Health Data Committee (HDC) in Utah annotated code 26-33a-104. Licensed commercial health insurance carriers covering 2,500 or more are required to submit member eligibility, medical claims, dental claims, and pharmacy claims as well as a health care provider file by administrative rule (R428-15). In addition to commercial insurance data, the APCD collects data from Medicaid. All files are submitted directly to the APCD data collection and enhancement vendor 3M Health Information Systems. These claims data are intended "to facilitate the promotion and accessibility of quality and cost-effective health care" as required by law .

Reporting Requirements

The Office of Health Care Statistics is required by Utah Code 26-33a-106.5 to produce comparisons of clinics and make the information available to the public free of charge. Comparative information may include generally accepted cost and quality measures. Clinics[1] with five or more physicians will be identified in public reports. Clinics with fewer than five physicians will be aggregated and reported on by geography. A comparison of quality measures by geography was published in December 2014 in accordance with this law. The clinic quality comparisons will be a published and a report submitted to the Legislature's Health and Human Services Committee before July 1, 2016.

Methodology

The Transparency Advisory Group (TAG) is a subcommittee of the HDC tasked with convening public meetings of community stakeholders to provide guidance on healthcare cost and quality transparency. TAG is jointly staffed by OHCS and HealthInsight and was specifically formed to address the requirements in 26-33a-106.5 although the scope of the group now includes additional responsibilities. Quality measures reported in the clinic comparisons were reviewed and selected by the group during summer 2015 and calculated for Utah's small health areas as a proof of concept for five measures considered for these clinic comparisons.[2]

After completing the review of quality measures with community stakeholders, TAG selected two quality measures for clinic comparisons: Avoidance of Antibiotic Treatment for Adults with Acute Bronchitis (AAB) and Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing. TAG also formed the Medical Provider Subcommittee (MPS) to review the results of quality measure calculations and provide feedback on patient attribution methodologies. The methods used for

[1] For our purposes, a "clinic" is a physician or group of physicians practicing at a specific location.

[2] The small area quality measures were published on UDOH's OpenData portal. https://opendata.utah.gov/d/u8tb-sa6w?category=Health&view_name=All-Payer-Claims-Database-APCD-Quality-Measures

calculating quality measures, identifying clinics, and attributing patients using Utah's 2014 APCD data are the subject of the following subsections.

Quality Measures

The two measures selected by TAG are based on the National Committee for Quality Assurance's (NCQA) Healthcare Data and Information Set (HEDIS) and are endorsed by the National Quality Forum (NQF). The eligibility, denominator, and numerator criteria are listed below along with a brief explanation of the measure's value from NCQA.

Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis (NQF# 0058)

AAB measures the percentage of adults 18–64 years of age with a diagnosis of acute bronchitis who were not dispensed an antibiotic prescription (a high rate is better). According to NCQA:

> Acute bronchitis almost always gets better on its own; therefore, adults who do not have other health problems should not take antibiotics. Ensuring the appropriate use of antibiotics for patients with acute bronchitis will help them avoid harmful side-effects and possible resistance to antibiotics over time.[3]

Eligibility:

- Age 18-64 at end of measurement period.
- Includes commercial and Medicaid lines of business.
- Continuous enrollment for 12 months prior to index event and 7 days after. No more than one month gap in coverage during this time.

Numerator:

- Person has pharmacy claim for antibiotic prescription with filled date between index event date and 3 days after the index event date. Index event is described as the first occurrence of the outpatient, emergency department or observation visit.
- Measure uses an inverted rate: 1-(numerator/denominator). This calculation is done in the reporting layer.

Denominator:

- Must have one outpatient, emergency department or observation visit between January 1 and December 24 of the measurement year with a diagnosis of acute bronchitis and none of the following:
    - Any claim/encounter within 12 months prior to the index event with a comorbid condition: HIV, malignant neoplasms, emphysema, COPD, cystic fibrosis, or comorbid conditions.
    - Antibiotic medication with filled-date within 30 days prior to the index event or was active on the index event date.
    - Pharyngitis or competing diagnosis within 30 days prior to index event or 7 days after.

[3] "Avoidance of Antibitotic Treatment in Adults with Acute Bronchitis," NCQA, 2015 HEDIS. http://www.ncqa.org/report-cards/health-plans/state-of-health-care-quality/2015-table-of-contents/acute-bronchitis#sthash.B00S5Sh2.dpuf

Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing (NQF# 0057)
HbA1c testing measures the percentage of adults age 18-75 with diabetes (type 1 and type 2) who had a blood sugar test. According to NCQA:

> Proper diabetes management is essential to control blood glucose, reduce risk of complications and prolong life. With support from health care providers, patients can manage their diabetes with self-care, taking medications as instructed, eating a healthy diet, being physically active and quitting smoking.[4]

Eligibility:
- Age at end of measurement period between 18 and 75.
- All lines of business included.
- Continuous enrollment with minimum of 11 months eligibility of primary medical coverage during measurement period.

Numerator:
- A visit for that enrollee is tagged with HbA1c test and visit service start date during measurement period.

Denominator:
- Identification of diabetes requires one of the following (using one year look back):
    - At least two visits in outpatient, observation or non-acute inpatient setting on separate dates during the measurement period or prior year with a diabetes diagnosis code. Note: need two visits in any combination of settings during previous two years.
    - One visit in an acute inpatient or Emergency Room setting during the measurement period or prior year with a diabetes diagnosis.
    - A pharmacy claim for insulin or hypoglycemic/anti-hyperglycemic during the measurement period or prior year.

Exclusions:
- No claim history with a diagnosis of polycystic ovaries.
- No diagnosis of period induced or gestational diabetes in the measurement period or prior year.

<u>Clinic Identification</u>
The Center for Medicare and Medicaid Services, National Plan and Provider Enumeration System (NPPES) maintains a registry of National Provider Identifiers (NPI). Individuals and organizations apply for NPIs and self-report names, specialties, and addresses. An NPI is a common data element on claims and OHCS incorporated the NPPES registry into the APCD to

[4] "Comprehensive Diabetes Care," NCQA, 2015 HEDIS. http://www.ncqa.org/report-cards/health-plans/state-of-health-care-quality/2015-table-of-contents/diabetes-care#sthash.yFIfCDPO.dpuf

help identify clinics with five or more physicians. Physician count was determined by the number of different NPIs listed as service provider on all claims generated by a billing group NPI.

Based on guidance received from TAG and MPS, clinics were identified by identifying *organizations* in NPPES with Utah practice locations specifying at least one of the following taxonomy codes:

207Q00000X (Family Medicine)
207QA0000X (Family Medicine - Adolescent Medicine)
207QA0505X (Family Medicine - Adult Medicine)
207QG0300X (Family Medicine - Geriatric Medicine)
208D00000X (General Practice)
207R00000X (Internal Medicine)
207RA0000X (Internal Medicine - Adolescent Medicine)
207RG0300X (Internal Medicine - Geriatric Medicine)
207V00000X (Obstetrics & Gynecology)
207VG0400X (Obstetrics & Gynecology - Gynecology)
207VM0101X (Obstetrics & Gynecology - Maternal & Fetal Medicine)
207VX0000X (Obstetrics & Gynecology - Obstetrics)
208000000X (Pediatrics)
2080A0000X (Pediatrics - Adolescent Medicine)
363L00000X (Nurse Practitioner)
363LA2200X (Nurse Practitioner - Adult Health)
363LF0000X (Nurse Practitioner - Family)
363LG0600X (Nurse Practitioner - Gerontology)
363LX0001X (Nurse Practitioner - Obstetrics & Gynecology)
363LP0200X (Nurse Practitioner - Pediatrics)
363LP2300X (Nurse Practitioner - Primary Care)
363A00000X (Physician Assistant)
363AM0700X (Physician Assistant - Medical)
261QC1500X (Clinic/Center - Community Health)
261QC1800X (Clinic/Center - Corporate Health)
261QF0400X (Clinic/Center - Federally Qualified Health Center (FQHC))
261QM1300X (Clinic/Center - Multi-Specialty)
261QP0904X (Clinic/Center - Public Health, Federal)
261QP0905X (Clinic/Center - Public Health, State or Local)
261QP2300X (Clinic/Center - Primary Care)
261QP2400X (Clinic/Center - Prison Health)
261QS1000X (Clinic/Center - Student Health)
261QV0200X (Clinic/Center - VA)

Attribution

This section describes the processes used for attributing a patient to a clinic identified using the process above. There is no national standard for attributing a patient to a health care provider

so OHCS reviewed several methods and worked with HealthInsight and volunteer clinics to audit the results. A common method for attributing patients is to identify the primary care provider where a patient receives most of their care, or where a patient was seen most recently for evaluation and management procedures.

Misattributing a patient is the primary challenge of all attribution methods. A method retrospectively attributing a patient to a single provider risks both false positive and false negative attribution. For example, a patient seen for acute bronchitis may be seen by a provider who is open late or on weekends but the patient and the care received for the acute bronchitis would be attributed to their primary care provider. This is both a false positive for their PCP and false negative for the urgent care provider.

OHCS staff expressed these concerns about false attribution to the MPS and two different methods, one for each quality measure, were proposed to the MPS and approved. The first method attributes a patient to as many providers as they saw in the measurement period. This many-to-many attribution method is used for the Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing measure (NQF 0057). A diabetic may receive care from several healthcare providers, all of whom should know a blood sugar test was performed or should order an annual blood sugar test if needed. By attributing a patient to all providers seen in a measurement period, all providers receive the benefit of the work of their peers and the potential that a provider's quality score is degraded without them having seen a patient is reduced as much as possible.

The second method attributes patients receiving acute care to the provider generating the claim that triggers inclusion in a quality measure. Triggering event attribution is used for the Avoidance of Antibiotic Treatment for Adults with Acute Bronchitis (AAB) measure (NQF 0058). Similar to the many-to-many attribution, triggering event attribution reduces as much as possible the risk that a provider is penalized for prescribing an antibiotic to a patient they see regularly but did not treat for acute bronchitis.

Additional Information

Please contact OHCS at healthcarestat@utah.gov with any questions regarding clinic quality comparisons.